WO 2005/018544 PCT/US2004/023099

## What is claimed is:

1. A composition for oral uptake of substance comprising an appropriate amount of carbohydrates.

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2. A composition for the oral delivery of one or more substances comprising an effective amount of an orally administered beta-glucan and one or more chemotherapeutic agents.

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- 3. The composition of any one of claims 1 or 2, wherein the carbohydrate is glucan.
- 4. The composition of claim 3, wherein the glucan contains
  1,3-1,6 or 1,3-1,4 mixed linkages or a mixture of both
  1,3-1,6 and 1,3-1,4 mixed linkages.
  - 5. The composition of claim 3, wherein the glucan enhances the efficacy of chemotherapeutic agents or anti-cancer antibodies.
    - 6. The composition of claim 3, wherein the glucan is derived from grass, plants, mushroom, yeast, barley, fungi, wheat or seaweed.

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- 7. The composition of claim 3, wherein the glucan is of high molecular weight.
- 8. The composition of claim 3, wherein the substance is a peptide, protein, RNA, DNA or plasmid.
  - 9. The composition of claim 3, wherein the substance is a chemotherapeutic agent.

WO 2005/018544 PCT/US2004/023099

10. A composition comprising an effective amount of orally administered (1→3),(1→6) or (1→3),(1→4) beta-glucan capable of enhancing efficacy of IgM antibodies.

- 5 11. The composition of claim 10, wherein the antibody is an antibody against cancer.
  - 12. The composition of claim 11, wherein the antibody is a tumor-binding antibody.

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13. The composition of claim 12, wherein the antibody is capable of activating complement.